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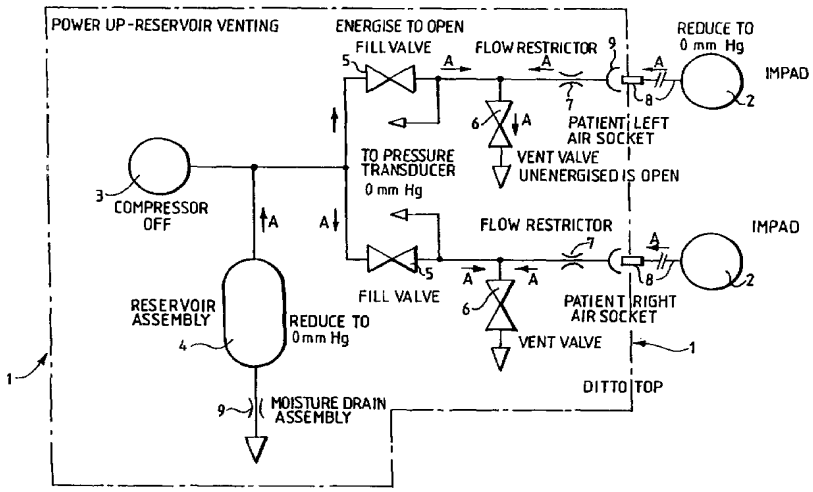
(54) Title: LEAKAGE DETECTION METHOD FOR A PRESSURISED MEDICAL APPLIANCE



(57) Abstract: A method for detecting leakage in a pressurised medical appliance prior to normal operation, the system including an air compressor and an inflatable bag or bladder coupled to the air compressor through the intermediary of a fill valve allowing air to pass to the bladder and a vent valve for venting the system, the fill valve and the vent valve being selectively operable during said normal operation to deliver cyclical pulses of air to inflate and deflate the bladder, the detection method comprising a) opening the fill valve to vent the system to atmospheric pressure, b) closing the vent valve, c) pressurising the system by means of the air compressor to a pre-determined threshold value, d) monitoring the pressure gradient or rise over a period of time to said threshold value and e) comparing the pressure gradient over said period of time or at intervals of time within said period of time with a pre-specified pressure gradient indicative of system integrity whereby to determine the presence or otherwise of air leakage in the system.

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